

**BUREAU OF HIGHWAYS
REQUEST FOR PROPOSAL
for
QUALIFICATIONS BASED SELECTION FOR PREQUALIFIED SERVICES**

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is currently prequalified for this type of work and you are interested in providing services, please indicate your interest by submitting a Proposal. The Proposal must be submitted in accordance with the latest "Vendor Selection Guidelines for Service Contracts", available on the MDOT website.

For efficiency sake, we are asking that the vendor firm provide three (3) paper copies of the Proposal to the MDOT project manager named in the attached scope of services.

These copies must be received by **1:00 p.m. on February 14, 2005**. Fax and electronic copies are not acceptable.

In addition, provide one unbound copy to:

Regular Mail:

Secretary, Operations Contract Support
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

OR

Overnight Mail:

Secretary, Operations Contract Support
Michigan Department of Transportation
425 W. Ottawa
Lansing, MI 48933

This copy is to be received within three working days after the due date and time specified above. Please do not deliver in person.

Any questions relative to the scope of services must be submitted by e-mail to the MDOT project manager. Any questions must be asked at least three working days prior to the due date and time specified above. All questions and their answers will be placed on the MDOT website as soon as possible after receipt of the questions. The names of vendors submitting questions will not be disclosed.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is

assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

The selection team will review the information submitted and will select the firm considered most qualified to perform the engineering services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

The maximum allowable pages for your proposal shall follow the guidelines detailed in Exhibit F of the Vendor Selection Guidelines (October 2004) for \$100,000/\$500,000.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

The scope of services is attached to this solicitation.

SCOPE OF SERVICES FOR:

Consultant construction "As-Needed" inspection, testing, and surveying.

PROJECT DESCRIPTION/PROJECT MANAGER DESIGNATION:

MDOT Resident Engineer / Project Manager:

William Erben, Resident Engineer
Taylor Transportation Service Center
25185 Goddard Road
Taylor, MI 48180

Phone 313.375.2409
Fax 313.295.0822
email erbenwr@michigan.gov

General Description of Work:

Primary Prequalification Classification:

Technical Assistance

Secondary Prequalification Classification:

Construction Staking

DBE Requirement: 0%

Provide experienced personnel for inspection, testing, and surveying services on an "as-needed" basis for road and bridge construction work. Work will include:

1. Performing project construction inspection.
2. Perform engineering staking as defined in Subsection 104.08A of the 2003 Standard Specifications for Construction.
3. Performing density and concrete testing services during construction.

The inspection, surveying and testing services may be needed full time (overtime may be necessary), beginning April 2005, or as soon as the contracted services are awarded, through December 2005.

Inspection, testing and survey services may be needed for hot mix asphalt construction, portland cement concrete construction, concrete pavement repairs, guardrail installation, permanent signing, foundation installation, traffic signal installation, landscaping work and other road and bridge construction operations. These services are anticipated to be primarily during daylight hours, Monday through Sunday. Night work may be required for some projects. At a minimum, work shift information will be provided when personnel are requested.

Full-time services will not be required for all projects at all times. This contract is for "as-needed" services, based on the intermittent needs of the project office for the items listed above. The consultant shall establish and list a point of contact for this work. The Consultant's point of

contact will be contacted with the requests for staff. Every attempt will be made to submit requests and schedule at least one week prior to the need for personnel, however it is expected that any requests made will be complied within a forty-eight (48) hour period. If the consultant is unable to fulfill the request, MDOT will utilize other consultants for the requested services.

The consultant provided personnel will report and be directly responsible to the Project Manager (Delivery Engineer) who is in responsible charge of the project construction. Project assignments, specific tasks and work hours will be given by the Delivery Engineer, Assistant Delivery Engineer's and/or the senior or lead MDOT technicians. However, the consultant personnel will work primarily with the Lansing TSC senior technician (Construction Technician - 12) for day to day assignments to ensure adequate services are being provided.

The consultant firm shall supply vehicles for as-needed staff, such vehicles for inspection and testing at a minimum shall be equipped with flashing yellow warning lights mounted on top of the vehicle.

The initial authorization for the inspection, testing and surveying services will be set at **5000 hours.**

Potential List of Staffed Projects:

CS. 82081- 78886A

CS. 82061- 78924A

Project Location: M-153 EB/WB Bridge over Hines Drive

Project Type of Work: Deck Overlay; Substructure Repair, Joint Replacement; Pin and Hanger Replacement and Beam Painting.

Anticipated Start Date of the Project: 7/15/05

Completion Date of the Project: 10/30/05

CS 82061- 79697A

CS 82061- 79769A

Project Location: US-12 from Henry Ruff to Gully Street; Wayne Co.

Project Type of Work: Coldmilling, HMA Resurfacing & Concrete Pavement Repairs

Anticipated Start Date of the Project: 7/06/05

Completion Date of the Project: 10/30/05

CS. 82061- 79698A

Project Location: US-12 from Pershing Street to Howe Street; Wayne Co.

Project Type of Work: Concrete Pavement Repairs and Diamond Grinding

Anticipated Start Date of the Project: 4/18/05

Completion Date of the Project: 6/01/05

CS. 82191- 76984A

Project Location: I-75 Goddard to Dix Toledo Connector; Wayne Co.

Project Type of Work: Concrete Pavement Repairs and Diamond Grinding

Anticipated Start Date of the Project: 4/15/05

Completion Date of the Project: 6/15/05

CS. 82052- 48609A

Project Location: US-24 from Pennsylvania Road to I-75 Connector; Wayne Co.

Project Type of Work: Coldmilling, HMA Resurfacing; Guardrail Upgrades

Anticipated Start Date of the Project: 4/01/05

Completion Date of the Project: 9/15/05

CS 82053- 59069A

Project Location: US-24 From South of Joy Road to Plymouth Road; Wayne Co.

Project Type of Work: Coldmilling, HMA Resurfacing, Concrete Patch Repairs, Diamond Grinding and Drainage Work.

Anticipated Start Date of the Project: 4/22/05

Completion Date of the Project: 7/09/05

CS. 82023-77727A

Project Location: I-94 from Wier Road east to M-10 in the City of Detroit; Wayne Co.

Project Type of Work: Various types of Bridge Rehabilitations; Bridge painting and Substructure Repair on 21 Bridges.

Anticipated Start Date of Project: 4/18/05

Completion Date of Project: 6/15/05

CS. 82081-76043A

CS. 82081-76044A

Project Location: M-153 from west of Gorman Road to Canton Center Road and at M-153 and Ridge Road

Project Type of Work: HMA Cold milling, pavement repairs, HMA resurfacing, drainage improvements, shoulder upgrades, and pavement markings.

Anticipated Start Date of the Project: 05/31/05

Anticipated Completion Date of the Project: 08/12/05

CS. 82081-45709A

Project Location: M-153 from Arcola Avenue to Vernon Street

Project Type of Work: Reconstruction, Concrete Patching and HMA overlay

Anticipated Start Date of the Project: 04/18/05

Anticipated Completion Date of the Project: 09/23/05

CS. 82292-76041A

CS. 82081-78170A

Project Location: SB I-275 Exit Ramp to M-153 and M-153 from I-275 to Lilley Road.

Project Type of Work: Ramp and Road Widening.

Anticipated Start Date of the Project: 04/18/05

Anticipated Completion Date of the Project: 05/25/05

GENERAL:

The Consultant shall furnish all services and labor necessary to conduct and complete the Construction Engineering Services described herein. The Consultant will also furnish materials, equipment, supplies, and incidentals necessary to perform the Services (other than those designated in writing to be furnished by the Department), and check and/or test the materials, equipment, supplies, and incidentals as necessary in carrying out this work. The Services will be

performed to the satisfaction of the Department consistent with applicable professional standards.

- A. The Consultant's principal contact with the Department will be through the designated Project Manager, or his/her designee.
- B. The Services described herein are financed with public funds. The Consultant will comply with applicable Federal and State laws, rules, and regulations. The Consultant will perform field operations in accordance with MIOSHA regulations and accepted safety practices. The Consultant will wear personal safety equipment in accordance with MDOT policy while on the project.
- C. The Consultant agrees to demonstrate knowledge of, and performance in compliance with, the standard construction practices of the Department; the Project construction contract, proposal, and plans; the Standard Specifications for Construction and applicable publications referenced within; the Michigan Construction Manual; the Materials Source Guide; the Materials Quality Assurance Procedures Manual; and all other references, guidelines, and procedures manuals needed to carry out the work described herein in an appropriate manner.
- D. The Consultant will notify the Project Manager, in writing, prior to any personnel changes from those specified in the Consultant's original approved proposal. Any personnel substitutions are subject to review and approval of the Project Manager.

GENERAL DESCRIPTION OF INSPECTION AND TESTING SERVICES:

The Consultant will provide, to the satisfaction of the Department, services as mentioned above, in the areas of HMA Construction Inspection and Testing Services, Portland Concrete Cement Construction Inspection, Bridge Painting, Bridge Steel Repair, Concrete Testing Services, Density Testing and Surveying/Staking Services as needed. Reporting, measurement, computation, and documentation requirements directed by the Project Manager and/or referenced in the Specifications, Plans, Proposal, the Michigan Construction Manual, the MDOT Materials Source Guide and all other applicable references, guidelines, and procedures manuals and associated with this Construction Inspection, Testing, and Surveying work is also included.

The consultant and any sub-consultant contracted by the Michigan Department of Transportation (MDOT) to perform density testing Services that use equipment regulated by the Nuclear Regulatory Commission (NRC) shall:

- 1. Posses a valid license issued by the NRC, or recognized agreement State, for ownership and use of sealed sources contained within portable nuclear density gages.
- 2. Provide the Radiation Safety Officer (RSO) of MDOT with a copy of the aforementioned license.
- 3. Comply with all rules and regulations set forth by titles 10 (Energy) and 49 (Transportation) of the Code of Federal Regulations.

Failure of any of the above will be found in noncompliance with the contract.

INSPECTION AND TESTING SERVICES TO BE PERFORMED BY THE CONSULTANT:

A. For Project Administration, the Consultant shall:

1. The Consultant will provide the necessary personnel to adequately perform the requirements of this Agreement, and that his/her employees will possess the experience, knowledge, and character to qualify them for the particular duties each is to perform.
2. The Consultant will furnish necessary inspection, and testing equipment needed to carry out the inspection and testing services.
3. The consultant will provide the inspector(s) lap top computers (or equivalent) with the most current Field Manager and/or Field Book software, and the inspector(s) will produce all daily inspection reports in this format. The inspectors will deliver all inspection reports to the Project Manager's field office daily, or as arranged.
4. Withdraw any personnel or halt any services no longer required, at the request of the Department, or within a reasonable time after the lack of need becomes apparent to the Consultant or the Project Manager. The Consultant will not be reimbursed for the cost of personnel charged to a project that the Project Manager has determined were unnecessary.

B. For Project Inspection, the Consultant shall:

1. **Inspectors:** Perform as the Inspector for the Project consistent with the Department's practice and in accordance with the Specifications, Plans, Proposal, the Michigan Construction Manual, the Materials Source Guide, and other applicable references, guidelines, and/or procedures manuals. The Inspector(s) will be assigned this Project with a sufficient number of technically qualified and experienced personnel to perform the Services required under the Agreement in a timely manner to avoid delay to the Construction Contractor.
2. **NPDES Inspection:** An MDEQ certified NPDES Stormwater Operator will be assigned to inspect and document the project per the NPDES requirements. Any violation of the NPDES permit by the construction contractor must be immediately reported to the Project Manager. Personnel performing inspection on areas where soil and erosion control are needed, must have completed and passed the three (3) day Soil Erosion and Sedimentation Control training course offered by the MDEQ.
3. **Traffic Control:** The Consultant will furnish inspectors qualified to assure contract compliance with Traffic Control requirements. Inspectors will be familiar with Department policies and Part 6 of the MMUTCD.
4. **Coordination:** Provide appropriate coordination, contact, and cooperation with affected local, state, and/or federal agencies; other Consultants and other Contractors; the general public; utilities and railroad companies; and local police, fire, and emergency services which

may be affected by the Project and which are deemed to be the responsibility of the Consultant and/or the Department.

5. **Phones:** The Consultants shall be equipped with cellular phones. The phones can not be charged as a direct expense to the project. Nextel phones with direct connect option are requested but not required.
6. **Contract Compliance:** The Consultant will immediately bring to the attention of the Project Manager any failure by the Contractor to comply with a plan or specification requirement, any problem, trends toward borderline compliance, or any other occurrence which may require resolution.
7. **Staking:** Perform staking in accordance with Department standards, including, but not limited to, any staking to be performed by the MDOT Engineer as indicated in section 104.08 in the Standard Specifications for Construction, to ensure accuracy and compliance with the contract documents. This includes preliminary project staking and construction verification staking. Notify the Project Manager of any plan errors, discrepancies or omissions identified by the Contractor and/or Consultant.
8. **Progress:** Keep daily diaries, sketches, logs, and records consistent with Department practice as may be needed to record the Contractor's progress. Notify the Project Manager of any anticipated Contractor's requests for extensions of time. Notify the Project Manager upon receipt of any Contractor's requests for extensions of time.
9. **Changes/Extras/Adjustments:** Notify the Project Manager immediately of any unanticipated Project conditions and any changes, extras, or adjustments to the contract.
10. **Contentious Issues:** Notify the Project Manager of any problems, issues, discrepancies, or other items brought to the attention of the Consultant by the Contractor.
11. **Consultant Deliverables:** Collect, properly label or identify, and deliver to the Department any original diaries, logs, notebooks, accounts, records, reports, as-constructed plans, other documents, and Project files prepared by the Consultant in the performance of the Agreement, upon completion or termination of the Agreement. Return, upon completion or termination of the Agreement, Specifications, Manuals, guides, written instructions, construction contracts and plans, unused forms, and any other documents and materials furnished by the Department. The Consultant may be responsible for replacing lost documents or materials at a fair and reasonable price.

C. For Quality Assurance Testing and Reporting, the Consultant shall:

1. **Material Testing:** Sample and/or test materials (except off-aggregates, concrete cylinder breaks, and HMA plant testing) to be incorporated in the work, including but not limited to, concrete quality assurance testing, on-site aggregates, and density testing and reporting, according to Materials Source Guide, and reject Contractor's work and materials not meeting the Specifications, Plans, Proposal, the Michigan Construction Manual, Materials Quality Assurance Manual, and all other applicable references, guidelines, and procedures manuals. Determine the acceptability of materials found to be in non-compliance.

Acceptance samples, tests, and reporting procedures will conform to the Specifications, Proposal, MDOT Materials Source Guide and other applicable references, guidelines, and procedures manuals prescribed by the Department.

2. **Material Certification:** Coordinate with MDOT office staff to make certain that acceptable test reports and material certifications from the supplier have been received, prior to the incorporation of materials in the work, for materials tested off the Project site.
3. **Materials Reports:** Submit materials test reports (including, but not limited to Moisture and Density 582B and 582BM, Inspector's Report of Concrete Placed 1174A and 1174A-M, Aggregate Inspection Reports 1900 & 1901, Bituminous QA reports, and Concrete QA reports, etc.) according to the distribution list on a daily basis, within one work day following the testing. The efficiency of the consultant in getting the "Moisture and Density Determination, Nuclear Method", Form 582B and 582BM, copy to the C&T, Density Technology Unit, 8885 Ricks Road, PO Box 30049, Lansing, MI 48909 will be measured by that unit and reported to the Project Manager.
4. **Testing Personnel:** For aggregate, concrete, density, and HMA testing, utilize only personnel certified according to current Department requirements. Personnel will be certified on all projects (not just NHS projects).

The concrete testing inspector will be certified as a Concrete Technician Michigan Level I through a program certified by Michigan Concrete Association Board of Examiners or the Michigan Concrete Paving Association.

Any inspector involved in sampling or testing of Hot Mix Asphalt must be a Michigan Qualified HMA QC/QA Technician.

Any inspector performing sampling or testing of aggregates must be a current Michigan Certified Aggregate Technician.

Any person performing density testing or handling of nuclear density testing equipment must have complete the Michigan Density Technology Certification Program and successfully completed radiation safety training.

5. **Density Gauge:** The consultant inspector will provide a Troxler Density Gauge and comply with all requirements related to the use of this gauge established by the Nuclear Regulatory Commission and MDOT. This gauge should be calibrated to meet MDOT requirements.
6. **Concrete Equipment:** The consultant inspector will be required to provide a Roll-O-Meter or Acme or Press-Air air entrainment gauge for concrete testing. This gauge should be calibrated to meet MDOT requirements.

D. For Measurement, Computation, Documentation, and Record-keeping, the Consultant shall:

1. **Documentation:** Measure and compute quantities, and provide appropriate documentation of all materials incorporated in the work and items of work completed, and maintain an item record account using Field Manager or Field Book software. The consultant must obtain and be able to use the most current available version of FieldManager as the primary system for automation of all required documentation for this project. Contact **Info Tech** at (352) 375-7624 or fax (352) 373-9586 or (www.infotechfl.com) to obtain software and information on training.
2. Assist in maintaining As-Constructed Plans throughout the project, showing any field changes, final utility locations, substantial quantity changes, etc. Verify the As-Constructed Plan information that is required to be provided by the Contractor.
3. **Reports-Consultant Generated:** Prepare such periodic, intermediate and final reports and records as may be required by the Department and as are applicable to the Project, which may include, but are not limited to:
 - a. Inspector's Daily Reports
 - b. Work Orders, (Form 1137)
 - c. Moisture and Density Determination Reports (Form 582BM)
 - d. Inspector's Report of Concrete Placed (Form 1174A-M)
 - e. NPDES Stormwater Operator Reports, (Form 1126)
 - f. Labor Compliance, such as the Weekly Employment and OJT Report (Form 1199)
 - g. Mechanical Analysis, (Form 1901)
 - h. Bi-Weekly Construction Progress Report (Form 1102A) and Weekly Statement of Working Days Charged (Form 1116), if applicable
 - i. Final Quantity Sheets
 - j. Force Accounts
 - k. Contractor Evaluation (Form 1182), and
 - l. Other records and/or reports as required for the individual Project by the Project Manager and/or as required by Specifications, Plans, Proposal, the Michigan Construction Manual, the Materials Source Guide, and other applicable references, guidelines, and/or procedures manuals.

E. For Finaling All Project Documentation, the Consultant shall:

1. **Final Measure and Summarize:** Final field measure applicable items of work. Prepare final summaries for applicable items of work.
2. **Project Review/Certification:** If requested, participate in and resolve items determined to be insufficient during the Department's review(s) of project records prior to submittal of the Final Estimate.

SERVICES TO BE PERFORMED BY THE DEPARTMENT:

- A. The Project Manager will furnish to the Consultant project specific construction contracts, proposals, plans, plan revisions, written instructions, and other information and/or data as deemed necessary by the Project Manager for the Services required herein.
- B. The Department will furnish concrete cylinder breaks, off-site aggregate testing, off-site inspections and tests of steel, cement, HMA mixture designs, sewer and drainage pipe, structural steel, prestressed girders and beams, traffic signs, and any other materials customarily tested in the Department laboratories with its own forces or by statewide contracts. The customary testing is described in the Materials Quality Assurance Manual with exceptions noted within the Specifications, Plans, and Proposal. The Consultant will be responsible for the sampling and transportation of all the materials to be tested by Department personnel.
- C. The Department will provide the HMA plant inspection required for Quality Assurance and will submit the QA reports to the Consultant Project Engineer for analysis and action. The Consultant will still be responsible for all on-site HMA inspection required, including, but not limited to, locating the required Quality Assurance cores, and coordinating with the contractor regarding this sampling.
- D. The Department will perform soil borings and subsurface investigation as necessary throughout the contract.
- E. Perform as the Project Engineer for the Project consistent with the Department's practice and in accordance with the Specifications, Plans, Proposal, the Michigan Construction Manual, the Materials Source Guide, and other applicable references, guidelines, and/or procedures manuals.
- F. The Department shall provide the office technician staff thru this contract to maintain the project files in accordance with MDOT procedures. The Consultant inspector will coordinate with the Department's staff to submit the required documentation, as indicated elsewhere in this Scope of Services.

CONSULTANT PAYMENT:

All invoices/bills for services must be directed to the Department and follow the 'then current' guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's Bulletin Board System. This document contains instructions and forms that must be followed and used for invoicing/ billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for Services rendered shall not exceed the "Cost Plus Fixed Fee Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Consultant. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice. Because the Department fiscal year begins on October 1, separate invoices must be created for September and October (irregardless of dollar amount).

The hours billed for the consultant inspector will not begin until the inspector reports to the project site, or the project office. Direct expenses will not be paid in excess of that allowed by the Department for its own employees. Supporting documentation must be submitted, with the invoice/bill, for all billable expenses on the Project. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the CE activities of this Project. Hours spent in administrative, clerical, or accounting roles for billing and support, are not considered allowable hours; there will be no reimbursement for these hours.

All consultant inspectors will be required to submit a copy of their weekly time sheet to the MDOT Project Manager, at the end of each work week, for reference in reviewing the consultant invoices for accuracy

Reimbursement for overtime hours will be limited to time spent on this project in excess of forty hours per week. Any variations to this rule should be included in the price proposal.